

Tay • Embedding subject guides at NUS Libraries

Embedding subject guides at NUS Libraries

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Abstract

Librarians around the world have begun to experiment with dynamic subject guides, dubbed “Subject Guide 2.0” (Farkas, 2007; Kroski, 2007; Yang, 2009). They took their cue from Web 2.0 sites by incorporating interactive features, social sharing and dynamic layouts to appeal to users. In this paper, the initial efforts to incorporate widgets into the subject guides of NUS Libraries are described.

Based on paper presented at the LAS Seminar October 2009.

Keywords: Library guides, Subject guides 2.0, Singapore, Web 2.0

Introduction

According to Vilenko (2007), the first subject guides (also known as Pathfinders) were created in the 1950s. As libraries began to move from print to the world wide web, the first generation subject guides began to appear, these guides were typically static html pages (Corrado & Frederick, 2008)

It is unclear who first coined the term “Subject Guide 2.0”, but by analogy to Web 2.0, it typically refers to subject guides that are dynamic and interactive.

Given that there is no canonical definition for the term, there is also no one way to implement “Subject Guide 2.0”. Libraries have used wikis (Mason, 2008), startup pages like Netvibes (Netvibes, 2009), Delicious linkrolls (Corrado, 2008), paid or open source database solutions like LibGuides (Cromer, 2009), Library à la Carte, SubjectData and even modified WordPress blogs (Corrado & Frederick, 2008). Figure 1 shows some academic libraries and the solutions they have used.

Figure 1: Academic Libraries and Examples of Subject Guide 2.0

LibGuides	Yale University http://guides.library.yale.edu/
Blogs	Plymouth State University http://library.plymouth.edu/by-subject/resources-for-business
Wiki	Ohio University http://www.library.ohiou.edu/subjects/bizwiki/index.php/Main_Page
Netvibes	The United World College of South-East Asia http://www.netvibes.com/uwcsea
Delicious Link rolls	The College of New Jersey http://www.tcnj.edu/~library/moulaison/ItalianStudies.html
Library a la Carte	Oregon State University http://ica.library.oregonstate.edu/subject-guide/421-Economics

These are very different systems, with very different features. Some are systems designed specifically for library subject guides, for example LibGuides and Library a la Carte, while others like blogs, wikis, and Delicious are generic systems that have been adapted for library use.

While all these systems provide dynamic and interactive features, a careful analysis of the features, showed that most of this interactivity results from the use of widgets rather than anything inherent in the platform.

What these platforms, such as blogs, wikis, as well as library specific database driven systems such as LibGuides, provide are systems that help library staff concentrate on creating content, instead of struggling with html. Many systems in particular the library specific systems like LibGuides and Library a la Carte also provide time saving features including the ability to share modular content and quickly update common content such as urls of databases.

Focusing on Widgets

NUS Libraries, like many libraries around the world, provides static html subject guides. While the systems mentioned above are exciting, they involve a radical change to the subject guides and they require work to migrate the content to another platform.

Instead, we adopted an evolutionary approach by adding widgets (Colvin, 2008) which added dynamic content to our existing subject guides. These widgets also have an added advantage that they can be easily reused wholesale with no modification on almost all of the Subject Guide 2.0 platforms mentioned.

As such libraries that want to experiment on a small scale, can experiment with widgets first on their static html pages, and if they do decide to shift to say LibGuides, they could carry over these widgets with them on the new platform. For instance, the figure below shows the same widget being used on LibGuides, Netvibes, and on a plain html page.

Colvin (2008, p. 241) defined a widget as “a self-contained scripted or coded item that can be embedded into a website, allowing for the easy use of resources or services through one central location.”

Many Web 2.0 services offer ready-made widgets, which allow users to simply copy and paste the html code into any webpage to embed the widget. Popular widgets that have been used by libraries in the past include chat widgets such as Meebo which allow users to chat with librarians, social bookmarking widgets such as Addthis, which allow users to quickly bookmark

library pages as well as social networking widgets like Facebook and Twitter badges to advertise the existence of Library Web 2.0 accounts.

There are literally thousands of ready-made widgets that one can use. In the NUS Libraries, four widgets were chosen based on the criteria of usefulness and stability. In this paper, we will cover two of the more significant widgets added to the subject guides.

Search Widgets

Most libraries including NUS Libraries' subject guides include a list of links to relevant databases. A recent study of student use of subject guides revealed that the articles and databases sections of the subject guides were "by far" the most heavily used (Staley, 2007). In an effort to improve user experience with subject guides, instead of simply creating a list of online database resources, we embedded search box widgets.

The chief virtue of search boxes is that users get instant gratification, they can simply enter a search, click the submit button and immediately see the results. This is in comparison with a database link, where users have to click on a link, wait for the search page to load, enter their search and view the results.

Figure 2: Search box widgets embedded into a subject guide



Courtois, Higgins, & Kapur (2005) found that when they embedded a box for users to provide feedback on the subject guide, what they found was that users were entering search terms into the box, this seemed to indicate that users might be expecting to be able to do searches to locate information from subject guides.

Does embedding search boxes really result in greater usage? Gale (<http://access.gale.com/widgets/>), who provides ready-made search box widgets for their line of products, reported that “overall growth in searches of libraries that have widget = 60%”. They said that this was based on an analysis of 5,000 libraries, 20% of libraries that used search widgets had 60% higher growth and they promised more information.

Library database vendors have begun to offer search box widgets and include:

- ProQuest/CSA (<http://www.proquest.com/en-US/utilities/widgets/search.shtml>)
- EBSCOhost (<http://www.ebscohost.com/thisTopic.php?marketID=6&topicID=1207>)
- Gale (<http://access.gale.com/widgets/>)
- JSTOR (<http://www.jstor.org/page/info/resources/librarians/searchWidget.jsp?cookieSet=1>)

However at the NUS Libraries, with access to hundreds of databases, a more generic solution was needed. Through the simple use of Javascript (see Figure 3), generic search boxes were created that could be applied to the majority of database searches.

By simply changing the search urls (lines in red), library staff could easily adapt the search box to work with most databases.

Figure 3 : Javascript code to embed JSTOR search widget

```
<script type="text/javascript">
function JSTORSearchGo() {
var url="http://libproxy1.nus.edu.sg/login?url=http://www.jstor.org/action/doBasicSearch?Query=";
var url2=""
var searchInputJSTOR = document.getElementById("JSTORSearchInput");
window.open(url + encodeURIComponent(searchInputJSTOR.value) + url2);
} </script>

<div>

<div id="enterText" style="position: absolute; left: -1000em; width: 20em;">Enter your search terms:</div>
<input type="text" id="JSTORSearchInput" size="30" onKeyPress="handleKeyPress(event,this.form)" />
<input type="button" value="Search" onclick="JSTORSearchGo()" />

</div>
```

It should be noted that the URLs include user authentication via EZproxy. If the user has not logged in before in the current browser session, they would be asked to login before being shown the results page.

Another enhancement was that the search box widget also included a function call to Google Analytics. Google Analytics (<http://www.google.com/analytics/>) is a popular free web tracking and analytics service that enable tracking of Web traffic to a website.

With a simple modification, libraries can use Google Analytics to track the number of times each search box was used. From Figure 4, it can be seen that the search box for Scopus (/outgoing/scopus) was used 162 times.

Figure 5 shows the Google Analytics code which enables tracking of the number of times the search box is used for searching.

Figure 4: Google Analytics showing usage of search boxed

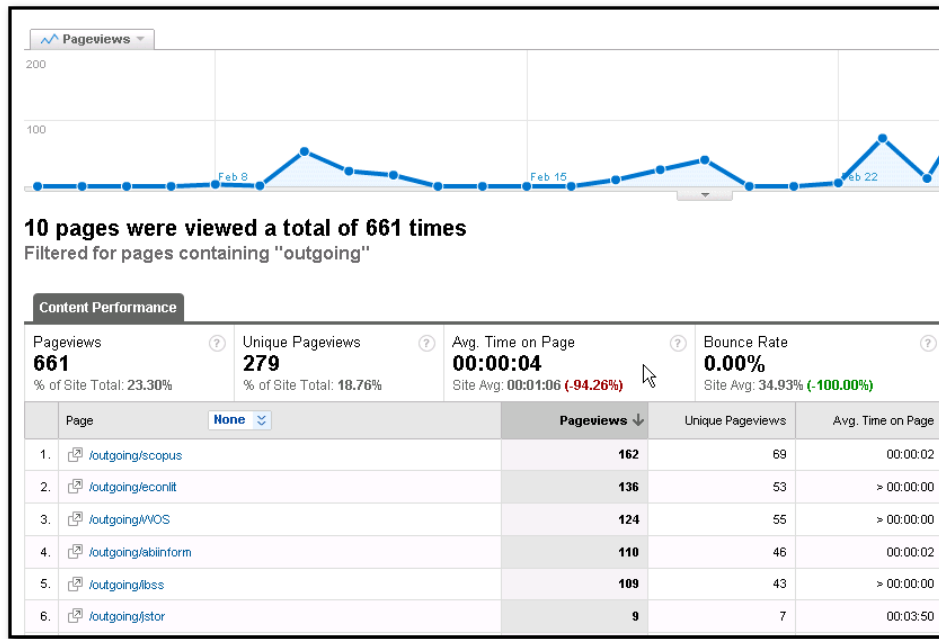


Figure 5 : Adding Google Analytics code to the search box widget

```
<script type="text/javascript">
function JSTORSearchGo() {
  pageTracker._trackPageview('/outgoing/economics_databases_jstor');
  var url="http://libproxy1.nus.edu.sg/login?url=http://www.jstor.org/action/doBasicSearch?Query=";
  var url2=""
  var searchInputJSTOR = document.getElementById("JSTORSearchInput");
  window.open(url + encodeURIComponent(searchInputJSTOR.value) + url2);
}</script>

<div>

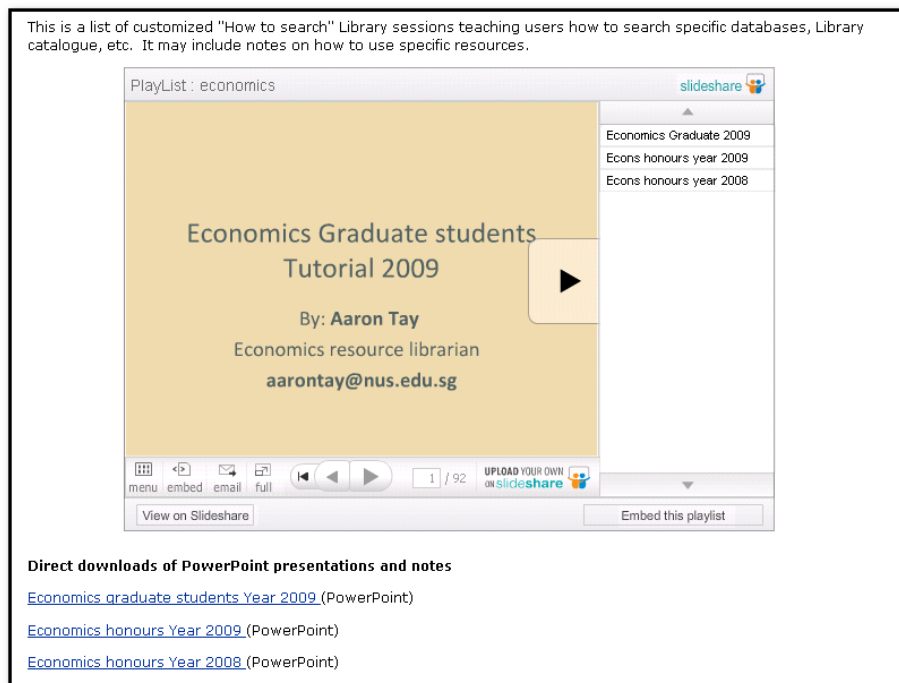
<div id="enterText" style="position: absolute; left: -1000em; width: 20em;">Enter your search terms:</div>
<input type="text" id="JSTORSearchInput" size="30" onKeyPress="handleKeyPress(event,this.form)" />
<input type="button" value="Search" onclick="JSTORSearchGo()" />

</div>
```

Slideshare Presentation Widgets

NUS Libraries also provides links to download PowerPoint presentations in the subject guides. However such links are unattractive and did not stand-out and could be easily missed among the other links. Slideshare (<http://www.slideshare.net/>) could provide a presentation widget that could be embedded into the subject guide and allow users to view the slides directly without having to download and open the file in PowerPoint.

Figure 6: Embedded SlideShare presentation in subject guide



One point to note is, while SlideShare allows anyone to view the slides via the widget, to download the PowerPoint presentations requires the user to have a Slideshare account. While this account is free, registration can be annoying to users. In order not to inconvenience the user, we loaded the presentations on our website and provided direct links for them to download the presentations.

Implementation

A pilot was carried out, and training conducted for Librarians in the Social Sciences team in June 2009. To ease implementation, widgets for search boxes were created in advance and the library team members could simply cut and paste the html code into their guides. It was found that the majority of the library staff had few problems with this.

While this project was meant to be a small scale pilot, the librarians from the other teams were also curious to learn and a training session was held for them as well. As of December 2009, the search boxes and Slideshare widgets were added to guides by the Social Sciences, Humanities and Area Studies teams.

Reactions of Users

As of December 2009, no formal survey had been conducted to measure user reaction to these widgets. However, from Figure 7 which compared the downloading of presentation slides seemed to suggest that the team (in this case the Social Sciences team) which had embedded the SlideShare widgets had a higher percentage of slide downloads per page view.

Figure 7: Comparison of slide downloads from subject guides

Downloads of <u>powerpoint</u> / view				
	Social Science	Team A	Team B	Team C
Sep 09	2.3	1.1	1.2	1.0
Aug 09	1.3	0.8	0.7	0.5
July 09	0.5	0.2	0.5	0.3

This was a somewhat interesting result, as one would expected that downloads of the slides would fall, since the slides could be viewed immediately without downloading.

One possible explanation was that the presentation widgets attracted the attention of users who would otherwise not have seen the presentation if it was just a hyperlink.

Another interesting side benefit as seen from Figure 8 was that some of the slides had attracted more views, adding to Favourites and comments from individuals who were not from NUS. This served as an affirmation that the guides by NUS Librarians were valuable and useful.

Figure 8: Slides “favourited” by Slideshare users

From	Subject	Date
SlideShare	[SlideShare] sources-for-social-work-research-library-tutorial-for-honours-year-and-graduate-student.. was favorited by librarydemomtpx	Sep 26, 09
SlideShare	[SlideShare] searching-sociological-abstracts was favorited by ktone5	Sep 19, 09
SlideShare	[SlideShare] researchon-ll09 was favorited by joe99999	Sep 10, 09
SlideShare	[SlideShare] econshons08 was favorited by mdcho	Sep 06, 09
SlideShare	[SlideShare] Laikaspoetnik is now following you on SlideShare	Sep 06, 09
SlideShare	[SlideShare] dustinkidd1 is now following you on SlideShare	Aug 24, 09
SlideShare	[SlideShare] sc210105 was favorited by pplife	Aug 09, 09
SlideShare	[SlideShare] lonesco favorited your slideshow!	Jul 18, 09
SlideShare	[SlideShare] aspeiser favorited your slideshow!	Jul 07, 09
SlideShare	[SlideShare] jojojolandia favorited your slideshow!	Apr 13, 09

Future Developments & Conclusion

The widgets implemented could be easily moved to any other platform. In February 2010, a decision had been made to subscribe to LibGuides, a subject guides platform by SpringShare.

Figure 9: Search box widgets in LibGuides

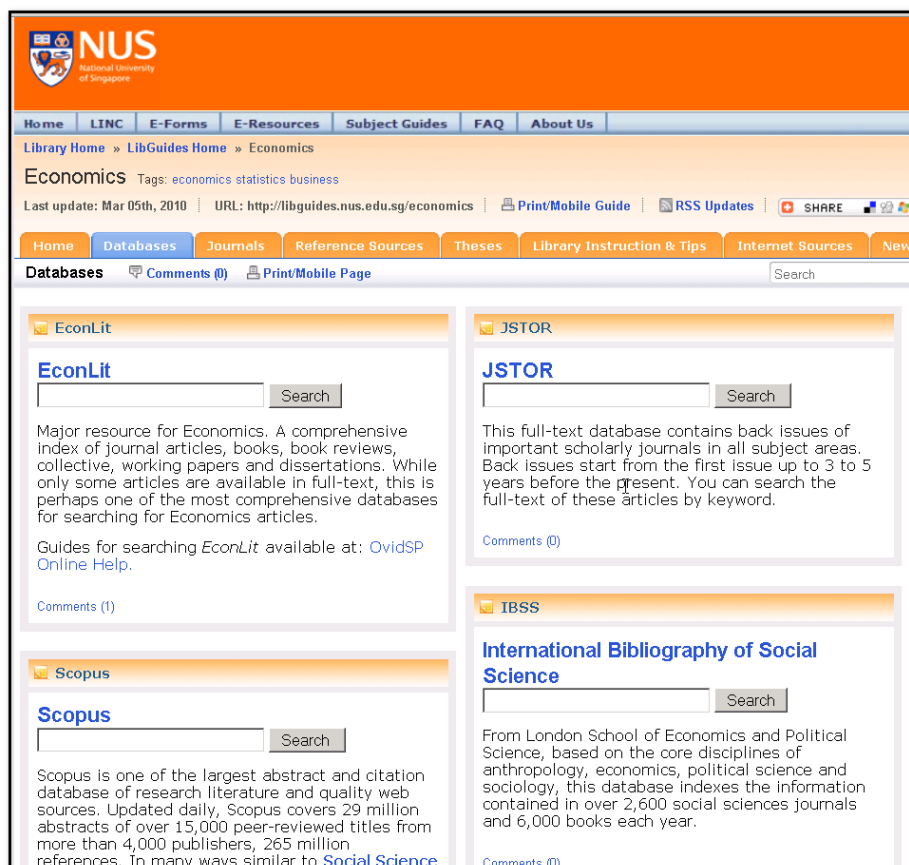


Figure 9 shows how a guide with search box widgets inserted would look like on LibGuides. In fact, LibGuides offers an added bonus. One of the barriers of adding search box widgets was that it is very time consuming to update. While many guides use the same search box widget (e.g. Scopus, Web of Science), they have to be individually added and updated.

LibGuides allows the creation of “linked boxes”. Not only can the widget be added with a couple of clicks, they can be linked to a “master box”. Any changes made to the master box will automatically be propagated to all other boxes, so the change only needed to be done once.

Other future extensions that can be considered include converting these widgets into Facebook applications, iGoogle widgets or Desktop Widgets.

One thing to be considered when adding widgets would be that while they allow dynamic content to be included, they tended to slow down the loading of the pages as content needs to be pulled in from external sources. Another concern was the reliance on a third party which the library did not directly control. The tradeoffs of adding widgets should be carefully considered.

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